

BROWN LEAF NECROSIS OF MAHONIA

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Mahonia is prized in many areas for its ornamental foliage and yellow flowers. It is an evergreen shrub, comprising about 50 species, and is native to north and central America and east and southeast Asia (3).

SYMPTOMS. The brown leaf necrosis of Mahonia bealei Carr. is a new disease and is characterized by dark brown, irregularly circular lesions that occur primarily along the margin and basal portion of the leaflets (Fig. 1A). The brown necrotic spots enlarge, coalesce and form a wide marginal brown necrosis of the leaves (Fig. 1B).

The fungus *Cylindrocladium* is becoming an increasingly serious pathogen on many hosts. *Cylindrocladium ellipticum* has been demonstrated to be the causal agent of this disease and is reported as a new species (1,2). The fungus spores are produced in tremendous numbers on the lower surface of the leaves and are disseminated primarily by splashing rains or overhead irrigation.

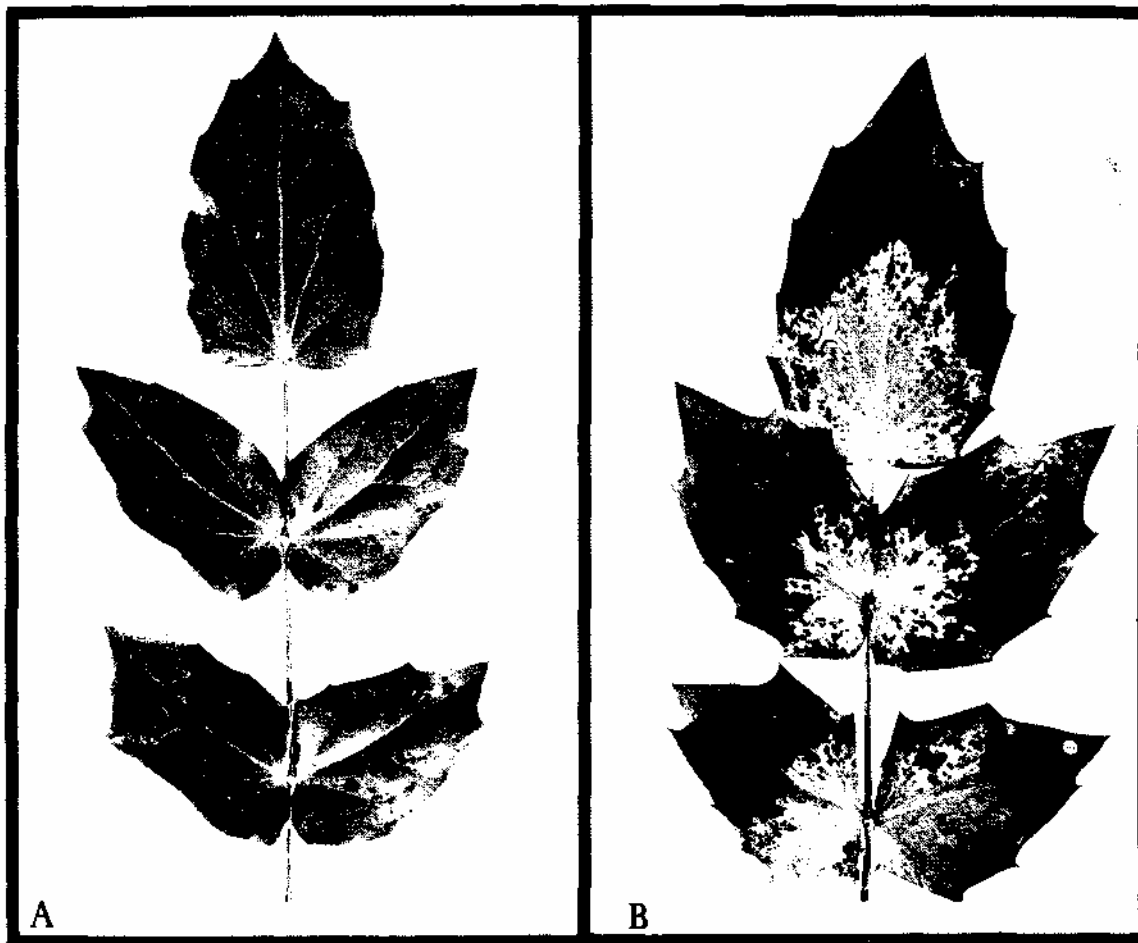


Fig. 1. Brown leaf necrosis of Mahonia bealei; A) leaf spots of initial infection; B) advanced brown marginal necrosis.

CONTROL. Though no specific disease control measure has been established for this disease of Mahonia bealei, effective disease control against this fungus pathogen has been demonstrated with the use of maneb and Daconil on azaleas.

Literature Cited

1. Alfieri, S. A., Jr., C. P. Seymour, and E. K. Sobers. 1970. A new disease of *Mahonia bealei* in Florida. *Phytopathology* 60:581 (Abstr.).
2. Alfieri, S. A., Jr., C. P. Seymour, and E. K. Sobers. 1970. Brown leaf necrosis of *Mahonia bealei* caused by *Cylindrocladium ellipticum* sp. nov. *Phytopathology* 60: (In press).
3. Bailey, L. H. 1966. Manual of cultivated plants. MacMillan Co., New York. 1116 p.